

Robert Berger Collection Finding Aids

Robert L. Berger Collection Finding Aid

March 2020

Summary Information

Title: Robert L. Berger Papers (1926-2017)

Creator: Berger, Robert L.

Dates:

Extent: 47 boxes

Abstract:

In 1962, Dr. Robert L. Berger joined the Laboratory of Technical Development as a senior scientist in the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health in Bethesda, MD. In 1977, he was named chief of a Section on Biophysical Instrumentation, a post he held until 1994. He also served as Invention Development Coordinator for NHLBI from 1988-1994. He published more than 100 scientific papers over his thirty-two-year career and was awarded several patents for instruments he developed, many of which are part of the NIH Stetten Museum collection.

Language: Collection materials primarily in English

Location: Materials stored at the Office of NIH History and Stetten Museum on the NIH campus. Contact the office for scheduling at 301-496-6610 or 301-496-7695.

Access and Use

Provenance:

These files were transferred at various times from Dr. Robert Berger or his family after his death.

Access Restrictions:

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Preferred Citation:

Robert L. Berger Papers. Located in the Office of NIH History and Stetten Museum, National Institutes of Health.

Biography

Dr. Robert L. Berger was born in Omaha, Nebraska, and spent much of his childhood in St. Joseph, Missouri. In 1943, after graduating from high school, he joined the U.S. Merchant Marine as a radio operator stationed largely in the Pacific Theater from 1943-46. He earned his B.S. degree in physics and mathematics at Colorado State University in 1950 and his M.S. and Ph.D. in physics at the Pennsylvania State University in 1953 and 1956, respectively. In 1956-57, he was a British-American Postdoctoral Exchange Fellow of the American Cancer Society at Cambridge University. From 1957 to 1962, he rose from assistant professor to associate professor of physics at Utah State University. In 1962, he joined the Laboratory of Technical Development as a senior scientist in the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health in Bethesda, MD. In 1977, he was named chief of a Section on Biophysical Instrumentation, a post he held until 1994. He also served as Invention Development Coordinator for NHLBI from 1988-1994. He published more than 100 scientific papers over his thirty-two-year career and was awarded several patents for instruments he developed.

In 1994 Dr. Berger left NHLBI and joined the Blood Research Detachment as a senior investigator at Walter Reed Army Institute of Research (WRAIR) in Silver Spring, Maryland. He retired from federal service in 1996. In retirement, he oversaw WRAIR's student intern program in collaboration with Pennsylvania State University's Eberly College of Science. For his service, in 1997, the U.S. Department of Defense awarded him its Commanders Award. In 1998, he received the Eberly College Alumni Society's highest honor, its Distinguished Service Award, and in 2002, Penn State named him Honorary Grand Marshall of its Homecoming parade.

Dr. Berger was elected a Fellow of the American Physical Society and the American Association for the Advancement of Science. He was an early member of the Biophysical Society and was an organizer of the Biophysical Discussions, small meetings that focus on cutting-edge or emerging topics in biophysics. He was also a member of the British Biophysical Society, the Red Blood Cell Club, the Society of General Physiologists, the American Society of Molecular Biology and Biochemistry, and the Society of Sigma Xi.

Collection Scope and Content Note

Consists of correspondence, research notebooks, reports, diagrams, articles, photographs, and other materials relating to topics such as calorimetry, spectrometry, flow apparatus, mixing, and thermometry.

Subject Terms

Index Terms

These terms are indexed in the National Library of Medicine's online catalog LocatorPlus. Researchers wishing to find related materials should search the catalog using these terms.

MeSH Subjects

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Notebook: Electrical Measurements (class notes) 6/30/1949-1956

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Notebook: Chemical Thermodynamics 9/18/1951

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Theoretical Physics p. 530 (Part I) 1951

Class Notes: Statistics 1950-1951

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Berger, Robert L Chronological 1952 – 1953/1954

Class Notes: Theoretical Physics II p. 531

Notebook: Class notes: Math Theory 1952- 1955

Class Notes: Quantum Mechanics 1952-1953; 1 of 2

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Class Notes: Chemistry 1953

Class Notes: Kinetic Theory 1953

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Notebook (including some loose pages) Summer Institute Nuclear Reactor Theory 1958

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Berger, Robert L Chronological 1959 – 1961

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Professional Activities: Grants 1959

Research Projects: Edgerton, Germeshausen, and Grier, Inc. (EGG) 1959; Exploding wire and gun studies; 1 of 2

Research Projects: Edgerton, Germeshausen, and Grier, Inc. (EGG) 1959; Exploding wire and gun studies; 2 of 2

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Research Projects: Edgerton, Germeshausen, and Grier, Inc. (EGG) 1959; Progress report Environment Physics Dept.

Correspondence: 1960; 1 of 2

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Berger, Robert L. Diagrams 1972-1979

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Berger, Robert L. Diagrams 1980 -

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Berger Stop-Flow Syringe Drive Apparatus Handbook
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Durrum Stopped-Flow Spectro-Photometer
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Galvanometer Amplifier: late 1950s
Kel-F Components for Liquid Chromatography
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Biochemical Standards for Clinical Use

Bionetics Corp. – Hemoglobin Production in Red Blood Cell Storage: 1995

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Mark III Pre-Equilibrators/Microcalorimeters
Martin, Charles J.: 1984
Mermelstein, Andrew L: 1990
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Nuclear Reactor Simulator and Power Plant Simulator
Nuclear Reactor Laboratory Manual: 1958
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Olis Online Instrument Systems, Inc. Jefferson GA
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Pulse Accelerated Flow Apparatus Instrument
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Software Construction, Inc. Adair (Edward DeLand)
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Stop Flow Enzyme Studies
Submicron, Inc.
Suga, Hiroshi (1988-1989)
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Transport of Oxygen and Carbon Dioxide
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Berger, Robert L. Personal and Biographical

Personal and Biographical

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Budget and Pay Grade

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Grant Application "The Effect of Gamma Rays on the Hemolysis of Red Cells: 1958

Green, Maurice Fellowship

Hess, John R. AAAS Fellowship

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Levin, Ira W. Langmuir Prize

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Hess, John R.

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Technical Report V: Analysis of Thermal and Molecular Diffusion by the Finite Element Method

Technical Reports I, II, III: Analysis of the Thermal Diffusion in a Cylindrical Calorimeter of Transient Heat Produced by Biochemical Reactions by Norman Davids and Robert L. Berger

Technical Report VI: High Speed Stopped Flow Microcalorimeter folder 1 of 2

Technical Report VI: High Speed Flow Microcalorimeter Computer Aided Design Experimental Procedures – Data Reconstruction by Bohdan Balko and Robert L. Berger folder 2 of 2

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